



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,942	07/29/2003	Mustafa Michael Pinarbasi	HSJ920030061US1	1930

7590 11/02/2005

Hitachi Global Storage Technologies
Intellectual Property Law
5600 Cottle Road (NHGB/014-2)
San Jose, CA 95193

EXAMINER

WATKO, JULIE ANNE

ART UNIT	PAPER NUMBER
----------	--------------

2653

DATE MAILED: 11/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/629,942

Applicant(s)

PINARBASI, MUSTAFA MICHAEL

Examiner

Julie Anne Watko

Art Unit

2653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 8-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☒ Claim(s) 15-17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07/29/2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 4-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4 recites the limitation "said head surface" in line 4. Claim 6 recites the limitation "said head surface" in line 5. There is insufficient antecedent basis for this limitation in the claims.

Claim Rejections - 35 USC § 102

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Taniyama et al (US Pat. No. 5897969).

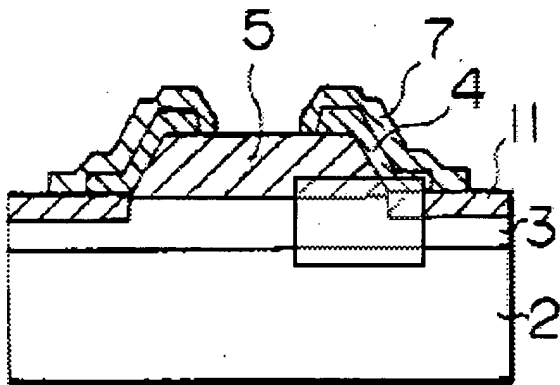
Due to similarities in claim recitations, the independent claims will be treated together.

As recited in claims 1, 4 and 6, Taniyama et al show a magnetic read head (see Fig. 10D) that has a head surface comprising a read sensor 5 that forms a portion of said head surface and has first and second side walls which extend into the read head from said head surface; nonmagnetic electrically insulative first (including 3 and 11) and second 8 read gap layers wherein the first read gap layer includes a read gap material layer 3 and first and second refill gap layers 11; the read gap material layer having first and second depressions (in which refill

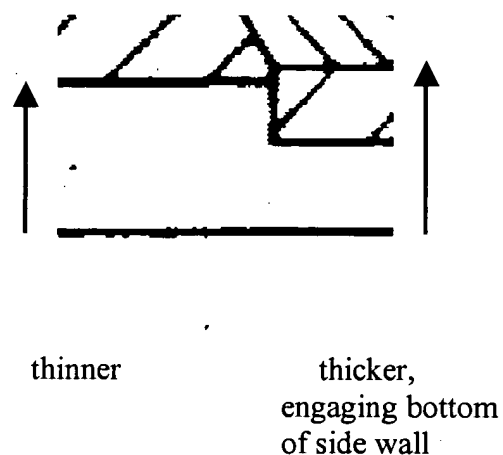
Art Unit: 2653

layers 11 are located) which extend laterally from the first and second side walls respectively of the sensor; the first and second refill gap 11 layers being disposed in the first and second depressions and engaging a bottom portion of the first side wall and engaging a bottom portion of the second side wall (see Fig. 10D, annotated detail) respectively; the first read gap layer having first and second portions which extend laterally from the first and second side walls of the sensor and a third portion which engages a bottom surface of the sensor and is located between said first and second portions; and a first lead layer 7 electrically connected to a top portion of the first side wall and a second lead layer 7 electrically connected to a top portion of the second side wall.

Taniyama et al Fig. 10D
(showing region of detail)



Detail
(annotated)



As recited in claims 2, 4 and 6, in addition to the above teachings, Taniyama et al show a magnetic head (see Fig. 1) assembly comprising: a write head (including 9, 13 and 14); a read head adjacent the write head; a ferromagnetic first shield layer 2; the first read gap layer (3 and

Art Unit: 2653

11) interfacing the first shield layer 2; a ferromagnetic second shield layer 9 interfacing the second read gap layer.

As recited in claim 6, a housing; a magnetic medium supported in the housing; a support mounted in the housing for supporting the magnetic head assembly with said head surface facing the magnetic medium so that the magnetic head assembly is in a transducing relationship with the magnetic medium; a motor for moving the magnetic medium; and a processor connected to the magnetic head assembly and to the motor for exchanging signals with the magnetic head assembly and for controlling movement of the magnetic medium are all inherent to the “magnetic disc apparatuses” taught by Taniyama et al (see col. 1, lines 9-16).

As recited in claims 3, 5 and 7, Taniyama et al show first and second hard bias layers 4 interfacing the first and second refill gap layers 11 respectively and the top portion of the first and second side walls respectively; and said first and second lead layers 7 interfacing the first and second hard bias layers 4 respectively.

Allowable Subject Matter

5. Claims 15-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

6. Applicant's arguments filed October 20, 2005, have been fully considered but they are not persuasive.

On page 12, 1st paragraph, Applicant argues “Claims 1-7 were rejected under 35 USC 102(b) as being anticipated by Taniyama. Amended claim 1 is distinguished over Taniyama by

Art Unit: 2653

reciting: "the first and second refill gap layers being disposed in the first and second depressions and engaging a bottom portion of the first side wall and engaging a bottom portion of the second side wall respectively; the first read gap layer having first and second portions which extend laterally from the first and second side walls of the sensor and a third portion which engages a bottom surface of the sensor and is located between said first and second portions; each of said first and second portions having a thickness which is greater than a thickness of said third portion;". The Examiner notes that in col. 4, lines 58-61, Taniyama et al teach that "The combined thickness of the insulating film 11 and the lower gap film (lower insulating film) 3 in a region other than the track portion, of course, can be larger than the track portion." Furthermore, this feature is shown in Fig. 10D of Taniyama et al. Thus, the independent claims remain anticipated, despite Applicant's amendments.

Applicant's arguments regarding claims 15-17 are persuasive.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 2653

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

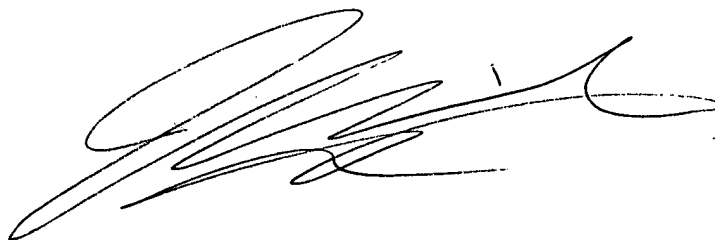
8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie Anne Watko whose telephone number is (571) 272-7597. The examiner can normally be reached on Monday-Thursday until 4:45PM, and Friday until 6PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R. Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Julie Anne Watko
Primary Examiner
Art Unit 2653

October 28, 2005
JAW

A handwritten signature in black ink, appearing to read 'Julie Anne Watko', with a large, sweeping flourish at the end.